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SUBJECT CODE NO:- H-1650
FACULTY OF ENGINEERING AND TECHNOLOGY
ME (Electrical Power Systems)
HVDC Transmission
(REVISED)

[Time: Three Hours]

[Max.Marks: 80]

Please check whether you have got the right question paper.

- N.B
1. All questions are compulsory each carries equal marks
 2. Figures to right indicate full marks
- Q.1 Solve any two
- 1) Draw schematic diagram of typical HVDC converter station & explain it in detail 10
 - 2) Give analysis of Graetz circuit in detail without overlap. 10
 - 3) Explain steady state characteristics of thyristor valve during ON & OFF state. 10
- Q.2 Solve any two
- 1) Discuss in detail principle of D.C. link control 10
 - 2) Explain over voltage and over current protection of HVDC valve 10
 - 3) What is pulse number. discuss choice of converter configuration considering 10
 - i) Valve rating
 - ii) Transformer rating
- Q.3 Solve any two
- 1) Discuss the types of MTDC system and give its comparison 10
 - 2) How overvoltages are occurred in converter station. Explain in short all possibilities 10
 - 3) Discuss modeling of A.C network 10
- Q.4 Solve any two
- 1) Explain in short static VAR system for controlling reactive power 10
 - 2) Explain carries frequency and RI Noise in HVDC system draw the model of PLC- RI to reduce noise 10
 - 3) Discuss design of High pass filter. 10